In the Claims:

Please cancel claims 1, 17 and 18.

Please amend claims 5-7, 9-12, 15 and 19 as set forth below in the "Listing of Claims".

Please add new claims 21 and 22 as set forth below in the "Listing of Claims".

LISTING OF CLAIMS

Claim 1 (Canceled)

Claim 2 (Withdrawn): A cleaning method of a film-forming unit that forms a thin film on an object to be processed by supplying a process gas into a reaction chamber containing the object to be processed, the method comprising;

a purging step of purging an inside of the reaction chamber by supplying into the reaction chamber a nitrogen-including gas that includes nitrogen and that is capable of being activated,

wherein the purging step has a step of activating the nitrogen-including gas and causing the activated nitrogen-including gas to react with metallic contaminant contained in a member in the reaction chamber so as to remove the metallic contaminant from the member.

Claim 3 (Withdrawn): A cleaning method of a film-forming unit that forms a thin film on an object to be processed by supplying a process gas into a reaction chamber containing the object to be processed, the method comprising;

a deposit-removing step of removing a deposit stuck to an inside of the film-forming unit by supplying into the reaction chamber a cleaning gas that includes fluorine, and

a purging step of purging an inside of the reaction chamber by supplying into the reaction chamber a nitrogen-including gas that includes nitrogen and that is capable of being activated,

wherein the purging step has a step of activating the nitrogen-including gas and causing the activated nitrogen-including gas to react with the fluorine diffused into a member in the

reaction chamber during the deposit-removing step, so as to remove the fluorine from the member.

Claim 4 (Original): A cleaning method of a film-forming unit that forms a thin film on an object to be processed by supplying a process gas into a reaction chamber containing the object to be processed, the method comprising;

a deposit-removing step of removing a deposit stuck to an inside of the film-forming unit by supplying into the reaction chamber a cleaning gas that includes fluorine, and

a purging step of purging an inside of the reaction chamber by supplying into the reaction chamber a nitrogen-including gas that includes nitrogen and that is capable of being activated,

wherein the purging step has a step of nitriding a surface of a member in the reaction chamber by activating the nitrogen-including gas.

Claim 5 (Currently Amended): A cleaning method of a film-forming unit according to ~~any of claims 1 to~~ claim 4, wherein

the nitrogen-including gas is ammonia, dinitrogen monoxide or nitric oxide.

Claim 6 (Currently Amended): A cleaning method of a film-forming unit according to ~~any of claims 1 to~~ claim 4, wherein

during the purging step, the inside of the reaction chamber is maintained at a range of 133 Pa to 53.3 kPa.

Claim 7 (Currently Amended): A cleaning method of a film-forming unit according to ~~any of claims 1 to~~ claim 4, wherein

during the purging step, the nitrogen-including gas is supplied into the reaction chamber heated to a predetermined temperature in order to be activated.

Claim 8 (Original): A cleaning method of a film-forming unit according to claim 7, wherein

during the purging step, the inside of the reaction chamber is heated to a range of 600 °C to 1050 °C.

Claim 9 (Currently Amended): A cleaning method of a film-forming unit according to ~~any of claims 1 to~~ claim 4, wherein

the member in the reaction chamber consists of quartz.

Claim 10 (Currently Amended): A cleaning method of a film-forming unit according to ~~any of claims 1 to~~ claim 4, wherein

the process gas comprises ammonia and a silicon-including gas,

the thin film is a silicon nitride film, and

the nitrogen-including gas is an ammonia gas.

Claim 11 (Currently Amended): A film-forming method comprising

a cleaning step of cleaning a film-forming unit in accordance with a cleaning method of a film-forming unit according to ~~any of claims 1 to~~ claim 4, and

a film-forming step of heating the inside of the reaction chamber containing the object to be processed to a predetermined temperature, and forming a thin film on the object to be processed by supplying a process gas into the reaction chamber.

Claim 12 (Currently Amended): A film-forming unit that forms a thin film on an object to be processed by supplying a process gas into a reaction chamber containing the object to be processed, the film-forming unit comprising;

a nitrogen-including-gas supplying unit that supplies directly into the reaction chamber a nitrogen-including gas that includes nitrogen and that is capable of being activated,

an activating unit that activates the nitrogen-including gas, the activating unit being a heating unit, and

a nitriding unit that nitrides a surface of a member in the reaction chamber by controlling the activating unit so as to activate the nitrogen-including gas.

Claim 13 (Withdrawn): A film-forming unit that forms a thin film on an object to be processed by supplying a process gas into a reaction chamber containing the object to be processed, the film-forming unit comprising;

a nitrogen-including-gas supplying unit that supplies into the reaction chamber a nitrogen-including gas that includes nitrogen and that is capable of being activated,

an activating unit that activates the nitrogen-including gas, and

a contaminant-removal controlling unit that removes metallic contaminant from a member in the reaction chamber by controlling the activating unit so as to activate the nitrogen-including gas and by causing the activated nitrogen-including gas to react with the metallic contaminant contained in the member.

Claim 14 (Withdrawn): A film-forming unit that forms a thin film on an object to be processed by supplying a process gas into a reaction chamber containing the object to be processed, the film-forming unit comprising;

a cleaning-gas supplying unit that supplies into the reaction chamber a cleaning gas that includes fluorine,

a nitrogen-including-gas supplying unit that supplies into the reaction chamber a nitrogen-including gas that includes nitrogen and that is capable of being activated,

an activating unit that activates the nitrogen-including gas, and

a fluorine-removal controlling unit that removes fluorine from a member in the reaction chamber by controlling the activating unit so as to activate the nitrogen-including gas and by causing the activated nitrogen-including gas to react with the fluorine diffused into the member.

Claim 15 (Currently Amended): A film-forming unit that forms a thin film on an object to be processed by supplying a process gas into a reaction chamber containing the object to be processed, the film-forming unit comprising;

a cleaning-gas supplying unit that supplies directly into the reaction chamber a cleaning gas that includes fluorine,

a nitrogen-including-gas supplying unit that supplies directly into the reaction chamber a nitrogen-including gas that includes nitrogen and that is capable of being activated,

an activating unit that activates the nitrogen-including gas, the activating unit being a heating unit, and

a nitriding unit that nitrides a surface of a member in the reaction chamber by controlling the activating unit so as to activate the nitrogen-including gas.

Claim 16 (Original): A film-forming unit according to any of claims 12 to 15, wherein the nitrogen-including gas is ammonia, dinitrogen monoxide or nitric oxide.

Claims 17 and 18 (Canceled)

Claim 19 (Currently Amended): A film-forming unit according to any of claims 12 to 15, wherein

the ~~activating unit is a~~ heating unit ~~that~~ heats the inside of the reaction chamber to a range of 600 °C to 1050 °C.

Claim 20 (Previously Presented): A film-forming unit according to any of claims 12 to 15, further comprising

a pressure-adjusting unit that maintains the inside of the reaction chamber at a range of 133 Pa to 53.3 kPa.

Claim 21 (New): A cleaning method of a film-forming unit according to claim 4, wherein the cleaning gas comprises fluorine gas.

Claim 22 (New): A cleaning method of a film-forming unit according to claim 4, wherein the thin film is a silicon nitride film.